Appendix F:

NJAC 7:14A-12: Effluent Standards Applicable to Direct Discharges to Surface Water and Indirect Discharges to Domestic Treatment Works

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Subchapter 12. Effluent Standards Applicable to Direct Discharges to Surface Water and Indirect Discharges to Domestic Treatment Works

7:14A-12.1 Purpose and Scope

- (a) This subchapter specifies Federal and State effluent standards which may be incorporated into a permit as an effluent limitation for direct discharges to surface water including those discharges conveyed to surface water via storm sewers and indirect discharges to DTWs.
- (b) The effluent standards contained in this subchapter are applicable as follows:
 - 1. Regarding stormwater discharges:
 - i. Any discharge of stormwater authorized by a general permit is exempt from the requirements of this subchapter unless such general permit provides otherwise;
 - ii. Any stormwater discharge shall be subject to one or more requirements of this subchapter when the effluent standard in question is achievable by stormwater treatment processes using commercially available technology and is not achievable using other practicable BMPs, and the fact sheet or statement of basis for the draft permit provides the basis for the inclusion of such requirement(s).
 - 2. Regarding discharges from combined sewer overflows:
 - i. Any discharge from a combined sewer overflow authorized by a general permit is exempt from the requirements of this subchapter unless such general permit provides otherwise:
 - ii. Any discharge from a combined sewer overflow shall be subject to one or more requirements of this subchapter when the fact sheet for the draft permit for such discharge provides the basis for the inclusion of such requirement(s).
 - 3. Any discharge other than those identified at (b)1. above shall be exempt from one or more of the requirements in this subchapter as specified in the applicable section.
 - 4. Any discharge of a parameter to which this subchapter applies that is also regulated by another regulatory agency shall meet the more stringent standards of such agency or of this subchapter.

7:14A-12.2 Secondary Treatment Effluent Standards

- (a) The requirements of this section shall apply to all direct discharges to surface water from publicly or privately owned domestic treatment works included in a NJPDES permit.
- (b) The minimum level of effluent quality attainable by secondary treatment in terms of the parameter BOD₅, except as provided for in N.J.A.C. 7:14A-12.3 is as follows:
 - 1. The monthly average value shall not exceed 30 mg/L;
 - 2. The weekly average value shall not exceed 45 mg/L; and
 - 3. The monthly average value for percent removal shall not be less than 85 percent.
- (c) In lieu of the parameter BOD₅ and the levels of the effluent quality specified in (b) above, the parameter CBOD₅ may be substituted as follows:
 - 1. The monthly average value shall not exceed 25 mg/L;
 - 2. The weekly average value shall not exceed 40 mg/L; and



- 3. The monthly average value for percent removal shall not be less than 85 percent.
- (d) Chemical oxygen demand COD or total organic carbon (TOC) may be substituted for BOD5 or CBOD5 when a long-term BOD5 or CBOD5:COD or BOD5 or CBOD5:TOC correlation is demonstrated whereby a permittee submits data which indicates that a different BOD5 or CBOD5:COD or BOD5 or CBOD5:TOC ratio would be more appropriate. In the absence of data to establish a long term correlation, the BOD5:COD ratio shall be assumed to be 1:2 and the BOD5:TOC ratio shall be assumed to be 1:1.
- (e) The minimum level of effluent quality attainable by secondary treatment in terms of the parameter TSS, except as provided in N.J.A.C. 7:14A-12.3 is as follows:
 - 1. The monthly average value shall not exceed 30 mg/L;
 - 2. The weekly average value shall not exceed 45 mg/L; and
 - 3. The monthly average value for percent removal shall not be less than 85 percent.
- (f) The pH shall be maintained within the limits of 6.0 to 9.0 standard units unless the facility demonstrates that:
 - 1. Inorganic chemicals are not added to the wastestream as part of the treatment process; and
 - 2. Contributions from industrial sources do not cause the pH of the effluent to be less than 6.0 or greater than 9.0.

7:14A-12.3 Secondary Treatment Special Considerations

- (a) This section identifies special considerations applicable to effluent limitations for BOD₅ or CBOD₅ and TSS percentage removal or, for facilities receiving waste from certain industrial categories, relief in terms of less stringent BOD₅ or CBOD₅ and TSS concentration levels when the level of treatment required is more stringent than the minimum treatment requirements specified in N.J.A.C. 7:14A-12.2.
- (b) For domestic treatment works receiving less concentrated influent wastewater from combined sewer systems during wet weather, the Department may remove, or impose a less stringent, BOD₅ or CBOD₅ and TSS percent removal requirement than specified in N.J.A.C. 7:14A-12.2(b)3, (c)3 or (e)3. For such treatment works, any attainable percentage removal level shall be defined on a case-by-case basis.
- (c) For domestic treatment works receiving less concentrated influent wastewater from combined sewer systems during dry weather, the Department shall remove, or impose a less stringent, BOD₅ or CBOD₅ and TSS percent removal requirement than specified in N.J.A.C. 7:14A-12.2(b)3, (c)3 or (e)3 if the permittee satisfactorily demonstrates that:
 - 1. The treatment works is consistently meeting, or will consistently meet its permit effluent concentration limits, but the percent removal requirements cannot be met due to less concentrated influent wastewater. In such case an applicant shall demonstrate compliance with effluent limitations consistently achievable through proper operations and maintenance, as defined in N.J.A.C. 7:14A-1.2; and
 - 2. To meet the percent removal requirements, the treatment works would have to achieve significantly more stringent effluent limitations, as defined in N.J.A.C. 7:14A-1.2, than would otherwise be required by the concentration-based standards and associated loadings; and
 - 3. The less concentrated influent wastewater does not result from either excessive infiltration or clear water industrial discharges (for example, non-contact cooling water discharges or other discharges which do not contain pollutants in sufficient quantities to otherwise be of concern) during dry weather periods. If the less concentrated influent wastewater is the result of clear water industrial discharges, then the treatment works must control such discharges in accordance with 40 CFR 403.
- (d) For domestic treatment works receiving less concentrated influent wastewater from a separate sewer system, the Department shall remove, or impose a less stringent, BOD5 or CBOD5 and TSS percent



removal requirement than specified in N.J.A.C. 7:14A-12.2(b)3, (c)3 or (e)3, if the permittee satisfactorily demonstrates that:

- 1. The treatment works is consistently meeting, or will consistently meet, its permit effluent concentration limits but the percent removal requirements cannot be met due to less concentrated influent wastewater. In such case an applicant shall demonstrate compliance with effluent limitations consistently achievable through proper operations and maintenance as defined in N.J.A.C. 7:14A-1.2; and
- 2. To meet the percent removal requirements, the treatment works would have to achieve significantly more stringent limitations as defined in N.J.A.C. 7:14A-1.2, than would otherwise be required by the concentration-based standards; and
- 3. The less concentrated influent wastewater is not the result of excessive inflow/infiltration.
- (e) For domestic treatment works receiving industrial waste from certain industrial categories, the average monthly values for BOD₅, or CBOD₅ and TSS specified in N.J.A.C. 7:14A-12.2(b)1, (c)1 or (e)1 shall be made less stringent provided that:
 - 1. The permitted discharge of BOD₅ or CBOD₅ and TSS from the domestic treatment works, attributable to the industrial category, would not be greater than that which would be permitted under sections 301(b)(1)(A)(i), 301(b)(2)(E) or 306 of the Federal Act if such industrial category were to discharge directly to surface water; and
 - 2. The flow or loading for BOD₅ or CBOD₅ and TSS introduced to the domestic treatment works by the industrial category exceeds 10 percent of the design flow or loading of the domestic treatment works. When such an adjustment is made, the weekly average value for BOD₅ or CBOD₅ and TSS specified in N.J.A.C. 7:14A-12.2(b)2, (c)2 or (e)2 shall be adjusted proportionately.
- (f) When requesting special consideration for any of the discharges described in (b), (c) and (d) above, an applicant shall submit, as part of the request, all demonstrations specified in the applicable subsection and, in addition, the following:
 - 1. The BOD₅, or CBOD₅, and TSS percent removal requested, as applicable, and whether the request is for seasonal or year round relief;
 - 2. If the discharge is also regulated by another regulatory agency (for example, Delaware River Basin Commission, Interstate Environmental Commission), a brief written statement from that regulatory agency that the agency has no objection to the request for special consideration;
 - 3. At a minimum, 24 consecutive months of influent and effluent data sampled at monthly intervals for BOD5 or CBOD5 and TSS concentration, as well as percentage removal, presented in summary form. Pollutant data for BOD5 or CBOD5 and TSS shall be sampled in accordance with the methods and procedures described in the applicable permit. Data collected during periods of upsets, bypasses, operational errors or other unusual conditions shall be excluded. The data shall contain, at a minimum, the following information:
 - i. Parameter value in mg/L for influent (concentration only) and effluent (concentration and percent removal);
 - ii. Date on which each sample was taken;
 - iii. Effluent flow at time of each sample;
 - iv. Weather conditions at time of each sampling (for example, raining or dry);
 - v. Total population served; and



- vi. The total amount of flow attributable to major industrial and commercial users contributing greater than 50,000 gallons per day each.
- 4. All permit limit exceedences;
- 5. For combined sewer systems only, the number of combined sewer overflow points and an estimation, with basis, of what percentage of the total collection system is combined; and
- 6. Any other data that the Department deems appropriate to make an accurate determination on the merits of the request.
- (g) When requesting special consideration for the discharge under (e) above, an applicant shall submit all applicable demonstrations specified in (e) 1 and 2, and, in addition, the following:
 - 1. If the discharge is also regulated by another regulatory agency (for example, Delaware River Basin Commission, Interstate Environmental Commission,), a brief written statement from that regulatory agency that the agency has no objection to the request for special consideration;
 - 2. The adjustment requested; and
 - 3. Any other data that the Department deems appropriate to make an accurate determination on the merits of the request.
- (h) The following domestic treatment works are not eligible to request special consideration under this section:
 - 1. Any domestic treatment works which cannot provide satisfactory demonstrations as required pursuant to (b) through (e) above, as applicable; and
 - 2. Any domestic treatment works subject to the requirements of another regulatory agency (for example, Delaware River Basin Commission, Interstate Environmental Commission) that has not received a written statement from that agency that it has no objection to the request.

7:14A-12.4 Minimum BOD₅ Effluent Standards

- (a) For direct discharges to surface water for which (BOD5 or CBOD5) water quality based effluent limitations based upon water quality studies acceptable to the Department have not been developed but are required under N.J.A.C. 7:9B-1.5 or 1.6, the minimum treatment requirements for BOD5 specified in (b) below shall apply except when more stringent effluent limitations are required by:
 - 1. Section 301 or 306 of the Federal Act;
 - 2. The Delaware River Basin Commission or the Interstate Environmental Commission, as applicable.
- (b) The minimum BOD₅ treatment requirements are as listed in the following table:

WATERSHED Type	RECEIVING WATER CLASSIFICATION	BOD ₅ MAXIMUM (MONTHLY/WEEKLY AVG.)	DISCHARGE
Atlantic Coastal Plain	FW2, SE1 SC	15/22.5 mg/L 30/45 mg/l	All Domestic or Domestic combined with industrial
Delaware River Basin	Tributaries Classified as FW2, SE1, SE2 Main stem all zones	25/37.5 mg/L As set forth in the Water Quality Standards for the Delaware River Basin; Resolution 67-7 of the DRBC; April 26, 1967 and subsequent revisions	All All

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Hackensack River Basin	FW2, SE1, SE2, SE3	30/45 mg/L	All
Passaic River Basin (including Newark Bay)	FW2 SE2, SE3	25/37.5 mg/L 30/45 mg/L	All All
Wallkill River Basin	FW2	15/22.5 mg/L	All

- (c) In applying the minimum treatment requirements contained in (b) above, the following substitutions may be made:
 - 1. For industrial treatment works, TOC or COD may be substituted for BOD5 when a long-term BOD5:COD or BOD5:TOC correlation has been demonstrated. In the absence of data (to establish a long term correlation), the BOD5:COD ratio shall be assumed to be 1:2 and the BOD5:TOC ratio shall be assumed to be 1:1. If subsequent data are submitted which indicate that a different BOD5:COD or BOD5:TOC ratio would be more appropriate, a written request shall be submitted to the Department; and
 - 2. For industrial or domestic treatment works, CBOD₅ may be substituted for BOD₅ as follows:
 - i. With prior approval of each regulatory agency with jurisdiction over the discharge, when applicable, if the effluent standard for BOD5 is 30/45 mg/L, a CBOD5 effluent standard of 25/40 mg/L, as allowed for in N.J.A.C. 7:14A-12.2(c)1 and 2, may be substituted; or
 - ii. With prior approval of each regulatory agency with jurisdiction over the discharge, when applicable, if the effluent standard for BOD5 is other than 30/45 mg/L, CBOD5 may be substituted for BOD5 when a long term BOD5:CBOD5 correlation has been demonstrated. When a request for a substitution of CBOD5 for BOD5 is made, the applicant shall submit data demonstrating the appropriate BOD5:CBOD5 correlation. The correlation demonstration shall consist of a minimum of 12 BOD5 and CBOD5 analyses of split samples obtained at a frequency of twice per month, subject to the following restrictions:
 - (1) For limitations applicable year round, or for limitations applicable during warm weather (for example, May through October), the samples shall be obtained during the months of May through October.
 - (2) For limitations applicable during cold weather (for example, November through April), the samples shall be obtained during the months of November through April.
 - (3) The monthly and weekly BOD₅ effluent limitations shall be recalculated as CBOD₅ monthly and weekly effluent limitations using the approved correlation factor.
- (d) Direct discharges to surface water from industrial treatment works shall be exempt from the minimum BOD₅ effluent standards in (b) above, when:
 - i. Statistically valid data indicate that the maximum projected BOD₅ concentration is consistently below the applicable effluent standard; or



ii. The Department determines that, based on wastewater generating activities, no potential exists for the discharge to add BOD₅ COD or TOC.

7:14A-12.5 Disinfection

- (a) All wastewater that could contain pathogenic organisms such as fecal coliform and/or enterococci organisms shall be subject to continuous year round disinfection prior to discharge into surface waters.
- (b) The State effluent standard for fecal coliform organisms is as follows:
 - 1. The monthly geometric mean shall not exceed 200 colonies/100 mL; and
 - 2. The weekly geometric mean shall not exceed 400 colonies/100 mL.

7:14A-12.6 Foam

- (a) DSW dischargers are prohibited from discharging foam or causing foaming of the receiving water that:
 - 1. Forms objectionable deposits on the receiving water;
 - 2. Forms floating masses producing a nuisance;
 - 3. Produces objectionable color or odor; or
 - 4. Interferes with a designated use of the waterbody.
- (b) Foaming of the receiving waterbody caused by natural conditions shall not be considered a violation of the standard in (a) above.
- (c) For discharges with submerged outfalls, the Department may take into consideration the location, depth and the dispersion characteristics of the discharge in deciding whether or not to include the provisions of (a) above in the permit.

7:14A-12.7 Phosphorus effluent standard

The effluent standard for phosphorus discharged to a freshwater lake, pond or reservoir, or tributaries to these waterbodies is that, at a minimum, no effluent shall contain more than 1.0 mg/l total phosphorus (as P), as a monthly average, unless the discharger(s) to such a waterbody can demonstrate that a less stringent requirement will not result in a violation of the Surface Water Quality Standards (N.J.A.C. 7:9B) or that the control of point sources alone, in the absence of effective nonpoint source controls, will not result in a significant reduction of phosphorus loadings to the waterbody.

7:14A-12.8 Oil and grease effluent standards

- (a) The requirements of N.J.A.C. 7:14A-12.8 through 12.10 apply to direct discharges of oil and grease to surface water, and indirect discharges of petroleum based oil and grease to a domestic treatment works, except as specifically exempted in N.J.A.C. 7:14A-12.10. Indirect users shall comply with any local agency standards for nonpetroleum based oil and grease.
- (b) (Reserved.)
- (c) Direct dischargers to surface waters shall limit the oil and grease effluent content so that such effluent does not:
 - 1. Exhibit a visible sheen;
 - 2. Exceed an average monthly discharge limitation of 10 mg/L; and
 - 3. Exceed a concentration of 15 mg/L in any single sample.
- (d) Indirect users discharging petroleum based oil and grease shall meet the following petroleum hydrocarbon effluent standards except where the control authority has determined that more stringent effluent limitations apply:
 - 1. The average monthly discharge limitation shall not exceed 100 mg/L; and



- 2. The concentration in any single sample shall not exceed 150 mg/L.
- (e) (Reserved.)
- (f) If a direct discharger only discharges petroleum based oil and grease, the Department may specify in the permit that compliance with the oil and grease effluent standards in 12.8(c) above may be monitored using the petroleum hydrocarbons analytical method.

7:14A-12.9 (Reserved.)

7:14A-12.10 Petroleum Hydrocarbon Exemptions

- (a) Indirect users shall be exempted from the petroleum hydrocarbon standards specified at N.J.A.C. 7:14A-12.8(d), provided the following requirements are met:
 - 1. The DTW into which the indirect user discharges submits a request for the exemption indicating it meets all of the following criteria:
 - i. The discharge from the domestic treatment works has met a 10 mg/L average and 15 mg/L maximum limitation for oil and grease for each of the reporting periods during the preceding 12 months, as determined by the Department;
 - ii. The sludge disposal option currently utilized or planned by the domestic treatment works considers petroleum hydrocarbons a beneficial constituent; and
 - iii. The DTW shows that the costs for oil and grease removal at its plant are in proportion to the other operation and maintenance costs of the plant.
 - 2. The Department shall have 90 days to review the request for the exemption and make a tentative decision to approve or deny the request. If additional information from the applicant is required, the 90 day period may be extended. The Department shall public notice the tentative decision.

7:14A-12.11 Toxic Effluent Standards

- (a) (Reserved.)
- (b) (Reserved.)
- (c) (Reserved.)
- (d) For discharges to surface water from site remediation projects, the chemical specific toxic pollutant effluent standards are set forth in N.J.A.C. 7:14A-12 Appendix B.
- (e) For new sources, new discharges or expanded direct discharges to surface water, the chemical specific toxic pollutant effluent standards are set forth in N.J.A.C. 7:14A-12 Appendix C.

7:14A-12 Appendix A (Reserved.)

7:14A-12: Appendix B Effluent Standards for Site Remediation Projects

		EFFLUENT	STANDARDS			
PARAMETER	FW-2 WATERS		SC, SE WATERS			
	monthly average	daily maximum	monthly average	daily maximum		
VOLATILE COMPOUNDS						
Acrolein		100		100		
Acrylonitrile		50		50		
Benzene		7	37	136		
Bromoform		8.6	29	58		

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initistrative code.				
Carbon Tetrachloride		6		8.8
Chlorobenzene	15	28	15	28
Chlorodibromomethane		8.2		14
Chloroethane	104	268	104	268
Chloroform		11.4	21	46
Dichlorobromomethane		5		12
1,1-Dichloroethane	22	59	22	59
1,2-Dichloroethane		3	68	211
1,1-Dichloroethylene		6	16	25
1,2-Dichloropropane	153	230	153	230
1,3-Dichloropropylene	10	20	29	44
Ethylbenzene	32	108	32	108
Methyl Bromide	20	40	20	40
Methyl Chloride	86	190	86	190
Methylene Chloride		9.4	40	89
1,1,2,2-Tetrachloroethane		10		10
Tetrachloroethylene		16	22	56
Toluene	26	80	26	80
1,2-Trans-Dichloroethylene	21	54	21	54
1,1,1-Trichloroethane	21	54	21	54
1,1,2-Trichloroethane		12	21	54
Trichloroethylene		5.4	21	54
Vinyl Chloride		10	104	268
ACID COMPOUNDS				
2-Chlorophenol	31	98	31	98
2,4-Dichlorophenol	39	112	39	112
2,4-Dimethylphenol	18	36	18	36
4,6-Dinitro-O-Cresol		60	78	277
2,4-Dinitrophenol	71	123	71	123
2-Nitrophenol	41	69	41	69
4-Nitrophenol	72	124	72	124
Pentachlorophenol		30		30
Phenol	15	26	15	26
2,4,6-Trichlorophenol		20		20

for applicators: 10 ug/L daily maximum and 25 ug/L instantaneous maximum
2 - for manufacturers and formulators - discharge prohibited
3 - for manufacturers: 1.5 ug/L daily maximum, 7.5 ug/L instantaneous maximum for formulators: discharge prohibited



^{1 -}for maunfacturers: 10 ug/L daily maximum and 50 ug/L instantaneous maximum

		EFFLUENT	STANDARDS			
PARAMETER	FW-2	WATERS		WATERS		
	monthly average	daily maximum	monthly average	daily maximum		
BASE NEUTRAL COMPOUNDS			_			
Anthracene	22	59	22	59		
Benzidine		50		50		
Benzo (a) Anthracene		10		10		
Benzo (a) Pyrene		20		20		
Benzo(b)fluoranthene		10		10		
Benzo (k) Fluoranthene		20		20		
Bis (2-Chloroethyl) Ether		10		10		
Bis (2-Chloroisopropyl) Ether	301	757	301	757		
Bis (2-Ethylhexyl) Phthalate		36	59	118		
Butyl Benzyl Phthalate		24		24		
Chrysene		20		20		
Dibenzo (a,h) Anthracene		20		20		
1,2-Dichlorobenzene	77	163	77	163		
1,3-Dichlorobenzene	31	44	31	44		
1,4-Dichlorobenzene		28		28		
3,3'-Dichlorobenzidine		60		60		
Diethyl Phthalate	81	203	81	203		
Dimethyl Phthalate	19	47	19	47		
Di-N-Butyl Phthalate	27	57	27	57		
2,4 Dinitrotoluene		10		18.2		
2,6-Dinitrotoluene	255	641	255	641		
Fluoranthene	25	68	25	68		
Fluorene	22	59	22	59		
Hexachlorobenzene		10		10		
Hexachlorobutadiene		10	20	49		
Hexachlorocyclopentadiene	240	480		1800		
Hexachloroethane	19	38	21	54		
Indeno (1,2,3-cd) Pyrene		20		20		
Isophorone		20		20		
Naphthalene	22	59	22	59		
Nitrobenzene	17	34	27	68		

for formulators: discharge prohibited



^{1 -}for maunfacturers: 10 ug/L daily maximum and 50 ug/L instantaneous maximum for applicators: 10 ug/L daily maximum and 25 ug/L instantaneous maximum
2 - for manufacturers and formulators - discharge prohibited
3 - for manufacturers: 1.5 ug/L daily maximum, 7.5 ug/L instantaneous maximum

N-Nitrosodimethylamine		20		20
N-Nitrosodiphenylamine		20		20
Phenanthrene	22	59	22	59
Pyrene	25	67	25	67
1,2,4-Trichlorobenzene	68	140	68	140

- 1 -for maunfacturers: 10 ug/L daily maximum and 50 ug/L instantaneous maximum for applicators: 10 ug/L daily maximum and 25 ug/L instantaneous maximum
 2 - for manufacturers and formulators - discharge prohibited
 3 - for manufacturers: 1.5 ug/L daily maximum, 7.5 ug/L instantaneous maximum
- for formulators: discharge prohibited



		EFFLUENT	STANDARDS			
PARAMETER		WATERS		WATERS		
	monthly average	daily maximum	monthly average	daily maximum		
PESTICIDES		<u> </u>				
Aldrin ²		0.04		0.04		
Alpha-BHC		0.02		0.02		
Beta-BHC	0.137	0.274	0.46	0.92		
Gamma-BHC (Lindane)		0.08		0.03		
Chlordane		0.2		0.2		
4,4'-DDT ²		0.06		0.06		
4,4'-DDE ²		0.04		0.04		
4,4'-DDD ²		0.04		0.04		
Dieldrin ²		0.03		0.03		
Alpha-Endosulfan		0.02		0.02		
Beta-Endosulfan		0.04		0.04		
Endosulfan Sulfate	0.93	1.86	2	4		
Endrin ³		0.04		0.04		
Endrin Aldehyde	0.76	1.52	0.81	1.62		
Heptachlor		0.02		0.02		
Heptachlor Epoxide		0.4		0.4		
Toxaphene ³		1		1		
METALS AND CYANIDE						
Arsenic	50	100	50	100		
Cadmium	50	100	50	100		
Chromium	50	100	50	100		
Copper	50	100	50	100		
Iron	1000	2000	1000	2000		
Lead	50	100	50	100		
Mercury		1		1		
Nickel	72	144	50	100		
Selenium	50	100	50	100		
Silver	25	50	25	50		
Zinc	100	200	100	200		
Cyanide	100	200	100	200		
Dioxin						

- 1 -for maunfacturers: 10 ug/L daily maximum and 50 ug/L instantaneous maximum for applicators: 10 ug/L daily maximum and 25 ug/L instantaneous maximum
 2 - for manufacturers and formulators - discharge prohibited
 3 - for manufacturers: 1.5 ug/L daily maximum, 7.5 ug/L instantaneous maximum
- for formulators: discharge prohibited



2,3,7,8-Tetrachlorodibenzo -p-Dioxin		0.01	0.01
PCBs ²	•		
PCBs-1242, 1254, 1221,			
1232, 1248, 1260, 1016		0.5	0.5

- 1 -for maunfacturers: 10 ug/L daily maximum and 50 ug/L instantaneous maximum for applicators: 10 ug/L daily maximum and 25 ug/L instantaneous maximum
 2 - for manufacturers and formulators - discharge prohibited
 3 - for manufacturers: 1.5 ug/L daily maximum, 7.5 ug/L instantaneous maximum
- for formulators: discharge prohibited



Effluent Standards for New Sources, New Discharges or Expanded Direct **7:14A-12: Appendix C Discharges**

		FLOW < 7Q			FACILITY FLOW > 7Q 10 & SMALL TIDAL			
PARAMETER		VATERS		WATERS		WATERS		WATERS
	monthly average	daily maximum	monthly average	daily maximum	monthly average	daily maximum	monthly average	daily maximum
VOLATILE COMPOUNDS						T		
Acrolein		100		100		100		100
Acrylonitrile		50		50		50		50
Benzene		24	37	136		7	37	136
Bromoform	29	58	29	58		8.6	29	58
Carbon Tetrachloride		6	18	38		6		8.8
Chlorobenzene	15	28	15	28	15	28	15	28
Chlorodibromomethane		14		14		8.2		14
Chloroethane	104	268	104	268	104	268	104	268
Chloroform	21	46	21	46		11.4	21	46
Dichlorobromomethane		5.4		12		5		12
1,1-Dichloroethane	22	59	22	59	22	59	22	59
1,2-Dichloroethane		7.6	68	211		3	68	211
1,1-Dichloroethylene	16	11.4	16	25		6	16	25
1,2-Dichloropropane	153	230	153	230	153	230	153	230
1,3-Dichloropropylene	29	44	29	44		20	29	44
Ethylbenzene	32	108	32	108	32	108	32	108
Methyl Bromide	20	40	20	40	20	40	20	40
Methyl Chloride	86	190	86	190	86	190	86	190
Methylene Chloride	40	89	40	89		9.4	40	89
1,1,2,2-Tetrachloroethane		10		10		10		10
Tetrachloroethylene	22	56	22	56		16	22	56
Toluene	26	80	26	80	26	80	26	80
1,2-Trans-Dichloroethylene	21	54	21	54	21	54	21	54
1,1,1-Trichloroethane	21	54	21	54	21	54	21	54
1,1,2-Trichloroethane	21	54	21	54		12	21	54
Trichloroethylene	21	54	21	54		5.4	21	54
Vinyl Chloride	20	40	104	268		10	104	268
ACID COMPOUNDS								
2-Chlorophenol	31	98	31	98	31	98	31	98

for formulators: discharge prohibited



^{1 -}for maunfacturers: 10 ug/L daily maximum and 50 ug/L instantaneous maximum for applicators: 10 ug/L daily maximum and 25 ug/L instantaneous maximum
2 - for manufacturers and formulators - discharge prohibited
3 - for manufacturers: 0.1 ug/L daily maximum, 0.5 ug/L instantaneous maximum

2,4-Dichlorophenol	39	112	39	112	39	112	39	112
2,4-Dimethylphenol	18	36	18	36	18	36	18	36
4,6-Dinitro-O-Cresol	78	277	78	277		60	78	277
2,4-Dinitrophenol	71	123	71	123	71	123	71	123
2-Nitrophenol	41	69	41	69	41	69	41	69
4-Nitrophenol	72	124	72	124	72	124	72	124
Pentachlorophenol		30		30		30		30
Phenol	15	26	15	26	15	26	15	26
2,4,6-Trichlorophenol		42	65	130		20		20

all units in ug/L

1 -for maunfacturers: 10 ug/L daily maximum and 50 ug/L instantaneous maximum for applicators: 10 ug/L daily maximum and 25 ug/L instantaneous maximum
2 - for manufacturers and formulators - discharge prohibited
3 - for manufacturers: 0.1 ug/L daily maximum, 0.5 ug/L instantaneous maximum

for formulators: discharge prohibited



					FACILITY FLOW > 7Q 10 & SMALL TIDAL			
PARAMETER		VATERS		WATERS		WATERS		WATERS
	monthly average	daily maximum	monthly average	daily maximum	monthly average	daily maximum	monthly average	daily maximum
BASE NEUTRAL COMPOUNDS								
Anthracene	22	59	22	59	22	59	22	59
Benzidine ¹		50		50		50		50
Benzo (a) Anthracene		10		10		10		10
Benzo (a) Pyrene		20		20		20		20
Benzo(b)fluoranthene		10		10		10		10
Benzo (k) Fluoranthene		20		20		20		20
Bis (2-Chloroethyl) Ether		10	14	28		10		10
Bis (2-Chloroisopropyl) Ether	301	757	301	757	301	757	301	757
Bis (2-Ethylhexyl) Phthalate	103	279	103	279		36	59	118
Butyl Benzyl Phthalate		24		24		24		24
Chrysene		20		20		20		20
Dibenzo (a,h) Anthracene		20		20		20		20
1,2-Dichlorobenzene	77	163	77	163	77	163	77	163
1,3-Dichlorobenzene	31	44	31	44	31	44	31	44
1,4-Dichlorobenzene		28		28		28		28
3,3'-Dichlorobenzidine		60		60		60		60
Diethyl Phthalate	81	203	81	203	81	203	81	203
Dimethyl Phthalate	19	47	19	47	19	47	19	47
Di-N-Butyl Phthalate	27	57	27	57	27	57	27	57
2,4 Dinitrotoluene		10	91	182		10		18.2
2,6-Dinitrotoluene	255	641	255	641	255	641	255	641
1,2-Diphenylhydrazine	0.4	0.8	5.4	10.8	0.04	0.08	0.54	1.08
(as Azobenzene)								
Fluoranthene	25	68	25	68	25	68	25	68
Fluorene	22	59	22	59	22	59	22	59
Hexachlorobenzene		10		10		10		10
Hexachlorobutadiene	20	49	20	49		10	20	49
Hexachlorocyclopentadiene		1800		1800	240	480		1800
Hexachloroethane	21	54	21	54	19	38	21	54
Indeno (1,2,3-cd) Pyrene		20		20		20		20

for formulators: discharge prohibited



^{1 -}for maunfacturers: 10 ug/L daily maximum and 50 ug/L instantaneous maximum for applicators: 10 ug/L daily maximum and 25 ug/L instantaneous maximum
2 - for manufacturers and formulators - discharge prohibited
3 - for manufacturers: 0.1 ug/L daily maximum, 0.5 ug/L instantaneous maximum

Isophorone		20		20		20		20
Naphthalene	22	59	22	59	22	59	22	59
Nitrobenzene	27	68	27	68	17	34	27	68
N-Nitrosodimethylamine		20	73	146		20		20
N-Nitrosodiphenylamine		20		20		20		20
Phenanthrene	22	59	22	59	22	59	22	59
Pyrene	25	67	25	67	25	67	25	67
1,2,4-Trichlorobenzene	68	140	68	140	68	140	68	140

- 1 -for maunfacturers: 10 ug/L daily maximum and 50 ug/L instantaneous maximum for applicators: 10 ug/L daily maximum and 25 ug/L instantaneous maximum
 2 - for manufacturers and formulators - discharge prohibited
 3 - for manufacturers: 0.1 ug/L daily maximum, 0.5 ug/L instantaneous maximum
- for formulators: discharge prohibited



	FACILITY F	Low < 7Q	10 & LARG	E TIDAL	FACILITY F	Low > 7Q	10 & SMAL	L TIDAL
PARAMETER	FW2 WATERS		SE, SC WATERS		FW2 WATERS		SE, SC WATERS	
	monthly average	daily maximum	monthly averageg	daily maximum	monthly average	daily maximum	monthly average	daily maximum
PESTICIDES		T	1	1	T	1	T	T
Aldrin ²		0.04		0.04		0.04		0.04
Alpha-BHC	0.0391	0.0782	0.131	0.262		0.02		0.026
Beta-BHC	1.4	2.8	4.6	9.2		0.28	0.46	0.92
Gamma-BHC (Lindane)		0.38		0.32		0.037		0.125
Chlordane		0.2		0.2		0.2		0.2
4,4'-DDT ²		0.06		0.06		0.06		0.06
4,4'-DDE ²		0.04		0.04		0.04		0.04
4,4'-DDD ²		0.04		0.04		0.04		0.04
Dieldrin ²		0.03		0.03		0.03		0.03
Alpha-Endosulfan	0.22	0.44		0.068		0.092		0.02
Beta-Endosulfan	0.22	0.44		0.068		0.092		0.02
Endosulfan Sulfate	9.3	18.6	20	40	0.93	1.86	2	4
Endrin ³		0.04		0.04		0.04		0.04
Endrin Aldehyde	7.6	15.2	8.1	16.2		1.52		1.62
Heptachlor		0.02		0.02		0.02		0.02
Heptachlor Epoxide		0.4		0.4		0.4		0.4
Toxaphene ³		1		1		1		1
METALS		1		T		1		T
Antimony	140	280				28		
Arsenic		8		8		8		8
Cadmium		4	43	86		4		15.2
Chromium, hexavalent	50	100	50	100	50	100	50	100
Chromium, total		32	409	818		16	41	82
Copper		18.4		10		10		10
Iron	1500	3000	1500	3000	1000	2000	1500	3000
Lead		21	69.5	139		10		13.9
Mercury		1		1		1		1
Nickel	720	1440	67.9	136	72	144		13.6
Selenium	20	40	300	600		10		
Silver		2.4		4.6		2		2
Thallium	17	34	62.2	124.4		10		12.4

for formulators: discharge prohibited



^{1 -}for maunfacturers: 10 ug/L daily maximum and 50 ug/L instantaneous maximum for applicators: 10 ug/L daily maximum and 25 ug/L instantaneous maximum
2 - for manufacturers and formulators - discharge prohibited
3 - for manufacturers: 0.1 ug/L daily maximum, 0.5 ug/L instantaneous maximum

Zinc	65	130	95	190		65	47.5	95
Cyanide		44		40		40		40
Total PCB's ²		0.5		0.5		0.5		0.5
DIOXIN								
2,3,7,8-Tetrachlorodibenzo								
-p-Dioxin		0.01		0.01		0.01		0.01
WHOLE EFFLUENT								
Chronic IC ₂₅ (% effluent)		>=50		>=50		>=100		>=100

- 1 -for maunfacturers: 10 ug/L daily maximum and 50 ug/L instantaneous maximum for applicators: 10 ug/L daily maximum and 25 ug/L instantaneous maximum
 2 - for manufacturers and formulators - discharge prohibited
 3 - for manufacturers: 0.1 ug/L daily maximum, 0.5 ug/L instantaneous maximum
- for formulators: discharge prohibited



N.J.A.C. 7:14A-12 Appendix C UNOFFICIAL VERSION. The Official Version can be obtained from West Publishing, 1-800-808-WEST

- 1 -for maunfacturers: $10\ ug/L$ daily maximum and $50\ ug/L$ instantaneous maximum
- 1 -for maunfacturers: 10 ug/L daily maximum and 50 ug/L instantaneous maximum for applicators: 10 ug/L daily maximum and 25 ug/L instantaneous maximum 2 for manufacturers and formulators discharge prohibited 3 for manufacturers: 0.1 ug/L daily maximum, 0.5 ug/L instantaneous maximum for formulators: discharge prohibited

Appendix G: Middlesex County Utilities Authority – Temporary Discharge Approval Application

DRAFT FINAL

MIDDLESEX COUNTY UTILITIES AUTHORITY

P.O. Box 159, Sayreville, NJ 08872-0159 (732)721-3800 Fax(732)727-2254

TEMPORARY DISCHARGE APPROVAL APPLICATION

Groundwater Remediation Control ____ New ____ Renew ____ Modify TDA No. _____

SE

Telepl	none No
Site Id	lentification
I.	Site name:
II.	Street:
III.	City:
IV.	State/Zip Code/County:
V.	Owner/Operator:
VI.	Telephone no.:
VII.	Type of Ownership: Federal State County
	Municipal Private Unknown
VIII.	Site Description:
Persor	n to contact concerning information herein:
Name	/Title:
Comp	any:
Telepl	none:
Autho	rized representative for the applicant/responsible porty.
	rized representative for the applicant/responsible party:
	/Title
-	any :

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1.5	Operational status of any facilities at the site:
	Open Closed Under Construction Proposed
	Date began/ended/proposed to begin
1.6	Please indicate if the facility employs (past, present) a process in any of the following industrial categories or business activities listed below:
	Aluminum Forming Asbestos Manufacturing Battery Manufacturing Builder's Paper Board and Mills Carbon Black Manufacturing Cement Manufacturing Coil Coating Copper Forming Dairy Products Processing Electrical & Electronic Components Electroplating/Metal Finishing Explosives Manufacturing Feedlots Ferroalloy Manufacturing Fertilizer Manufacturing Food/Edible Products- Specify: Glass Manufacturing Grain Mills Manufacturing Grain Mills Manufacturing Industrial Laundries Ink Formulating Inorganic Chemicals Iron & Steel Leather Tanning & Finishing Meat Processing
	Metal Products & Machinery Metal Molding & Casting (Foundries)
	Metal Molding & Casting (Foundries)Mining and Processing
	Nonferrous Metals Forming and Metal Powders
	Nonferrous Metals ManufacturingOil and Gas Extraction/Coastal Oil & Gas
	Or and Gas Extraction/Coastar On & Gas Organic Chemicals, Plastics and Synthetic Fibers
	Paint Formulating
	Paving and Roofing Materials)tars and Asphalts)
	Pesticide Chemicals/Formulating & Packaging
	Petroleum Refining
	Pharmaceutical Manufacturing
	Phosphate Manufacturing

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TION De (A	Porcelain E Pulp, Paper Rubber Mar Soap & Det Steam Elect Textile Mill Timber Proc Transportat Waste Treat Other – exp	, and Paperboanufacturing tergent Manufacturing tergent Manufactric Power Gends ducts Processirion Equipment the truent plain:	rd cturing erating ng Cleaning MATION	Discharge Approva	
TION De (A	Pulp, Paper Rubber Mai Soap & Det Steam Elect Textile Mill Timber Pro Transportat Waste Treat Other – exp	, and Paperboanufacturing tergent Manufacturing tergent Manufactric Power Gendls ducts Processirion Equipment the the theory of	ecturing derating and a cleaning are Cleaning and MATION and for Temporary		
TION De (A	Rubber Man Soap & Det Steam Elect Textile Mill Timber Pro Transportat Waste Treat Other – exp	nufacturing tergent Manufa tric Power Gen ls ducts Processir ion Equipment tment olain: ARGE INFOR	ecturing derating and a cleaning are Cleaning and MATION and for Temporary		
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De (A	N 2. DISCHA	ARGE INFOR	MATION I for Temporary		
De (A	escription of p	roject and need	l for Temporary	Discharge Approva	al.
	DEP Case Nu	ımber			
Naı	me:				
Div	vision:				
Buı	reau:				
Ad	dress:				
Tel	lephone:				
Du	ration of prop	osed discharge)		
	Days	Weeks	Months	Years	
Add Tel Du	dress:lephone:	oosed discharge	·		

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2.4	Volume of propose discharge
	Gallons per minute
	Gallons per day
	Total gallons for duration of project maximum of one year.
2.5	Pretreatment of proposed discharge
	Air Flotation Biological Treatment, type
	No Pretreatment Provided

SECTION 3. PROPOSED DISCHARGE CONSTITUENT CONCENTRATIONS

Please indicate by placing an "x" in the appropriate box by each listed chemical whether it is "Believed Absent", or "Believed Present" in the proposed discharge. If the effluent concentration is known or can be estimated, please fill in the appropriate space next to the chemical. If any analyses have been performed on the proposed discharge attach a copy of the most recent data to this application. Be sure to include the date of the analysis, name of the laboratory performing the analysis, location(s) from which sample(s) were taken (attach sketches, plans, etc., as necessary), type of sample taken (e.g. composite, grab), and chain of custody form. Please indicate which concentration measurements are estimated with an E, and explain estimation process.



3.1A USEPA PRIORITY POLLUTANT

Known or						
Chemical	Believed	Believed	Suspected			
Compound	Absent	Present	Conc. (mg/L)			
Compound	Hosent	Tresent	Cone. (mg/L)			
Acenaphthene	[]	[]	[]			
Acrolein	[]	į	[]			
Acrylonitrile	[]	[]	[]			
Benzene	[]	[]				
Benzidine	[]	[]	[]			
Carbon tetrachloride	[]	ίί	[]			
Chlorobenzene	[]	[]	[]			
1,2,4-Trichlorobenzene	[]	[]	[]			
Hexachlorobenzene	[]	ίί	[]			
1,2-Dichloroethane	[]	[]				
1,1,1-Trichloroethane	[]	[]				
Hexachlorobenzene	[]	[]				
1,1,2-Trichloroethane	[]	[]	[]			
1,1,2,2-Tetrachloroethane	[]	[]				
Chloroethane	[]	[]	[]			
Bis(chloromethyl)ether	[]	[]	[]			
Bis(2-chloroethyl)ether	[]	[]	[]			
2-Chloroethyl vinyl ether	[]	[]	[]			
2-Chloronaphthalene	[]	[]				
2,4,6-Trichlorophenol	[]	[]				
p-Chloro-m-cresol	[]	[]				
Chloroform	[]	[]	r ı			
2-Chlorophenol	[]	[]				
1,2-Dichlorobenzene	[]	[]	[]			
1,3-Dichlorobenzene	[]	[]	L J			
1,4-Dichlorobenzene	[]	[]				
3,3-Dichlorobenzidine	[]	[]	L J			
1,1-Dichloroethylene	L J []	[]	L J			
1,2-Trans-Dichloroethylene	L J	[]	L J			
2,4-Dichlorophenol	LJ	[]				
1,2-Dichloropropane		[]	L J			
1,3-Dichloropropylene	[] []	[] []	[]			
(1,3-dichloropropene)	[]	[]	[]			
2,4-Dimethylphenol	[] []	[] []	[]			
2,4-Dinitrotoluene	[] []	[] []				
2,6-Dinitrotoluene	[] []	[] []	[]			
	l J	L J				
1,2-Diphenylhydrazine	L J r 1	L J				
Ethylbenzene Fluoranthene	L J	L J	[]			
	L J	L J				
4-Chorophenyl phenyl ether	[]	LJ	[]			



3.1A USEPA PRIORITY POLLUTANT Continued

USEI AT KIOKITT TOLLU	IANI Commi	icu	V. a arra	
Chemical	Believed	Believed	Known	eted
Compound	Absent	Present	Conc.	(mg/L)
4-Bromophenyl phenyl ether Bis(2-chloroisopropyl)ether	[]	[]	[[]
Bis(2-chloroethoxy)methane		[]	į	j
Methylene chloride		[]	[j
Methyl chloride		LJ	L	J
(Chloromethane)	[]	[]	[]
Methyl bromide	LJ	LJ	L	J
(Bromomethane)	[]	Γ 1	[]
Bromoform	[]	[]	[]
Dichlorobromomethane	[]	[]	Ĺ]
Chlorodibromoethane	[]	[]	Ĺ]
Hexachlorobutadiene	[]	[]	L L]
Hexachlorocyclopentadiene	[]	[]	[]
Isohprone	[]	[]	Ĺ]
Naphthalene	[]	[]	[]
Nitrobenzene	[]	[]	L L]
2-Nitrophenol	[]	[]	Ĺ]
4-Nitrophenol	[]	[]	Ĺ]
4,6-Dinitro-o-cresol	[]	[]	Ĺ]
N-nitrosodimethylamine	[]	[]	[]
N-nitrosodiphenylamine	[]	[]	Ĺ]
N-nitrosodi-n-propylamine	[]	[]	Ĺ]
Pentachlorophenol	[]	[]	[]
Phenol		[]	Ĺ]
Bis(2-ethylhexyl)phthalate		[]	ſ]
Butyl benzyl phthalate		[]	ſ]
Di-n-butyl phthalate		[]	ſ]
Di-n-octyl phthalate		[]	ſ]
Diethyl phthalate	[]	[]	ĺ	i
Dimethyl phthalate	[]	[]	ĺ	ĺ
Benzo(a)anthracene	[]	[]	ĺ	ĺ
Benzo(a)pyrene	[]	[]	ĺ	ĺ
3,4,-Benzofluoranthene	[]	[]	ĺ	ĺ
Benzo(k)fluoranthene	[]	[]	Ī	ĺ
Chrysene	[]	[]	ĺ	ĺ
Acenaphthylene	[]	[]	ĺ	ĺ
Anthracene	[]	ĺĺ	ĺ	i
Benzo(ghi)perylene	[]	ĺĺ	Ţ	i
Fluorene	[]	ĨĨ	Ī	i
Phenanthrene		[]	[j
Dibenzo(a,h)anthracene	[]	[]	[]



3.4A USEPA PRIORITY POLLUTANT Continued

Chemical	Believed	Believed	Known or Suspected
Compound	Absent	Present	Conc. (mg/L)
Indeno(1,2,3-cd)pyrene	[]	[]	[]
Pyrene	[]	[]	[]
Tetrachloroethylene			. ,
(Perchlor)	[]	[]	[]
Tolune	[]	[]	[]
Trichloroethylene			
(Trichloroethene)	[]	[]	[]
Vinyl chloride	[]	[]	[]
Aldrin	[]	[]	[]
alpha-BHC	[]	[]	[]
beta-BHC	[]	[]	[]
gamma-BHC (Lindane)	[]	[]	[]
delta-BHC	[]	[]	[]
4,4-DDT	[]	[]	[]
4,4-DDE	[]	[]	[]
4,4-DDD	[]	[]	[]
Chlordane	[]	[]	[]
Dieldrin	[]	[]	[]
Endosulfan I	[]	[]	[]
Endosulfan II	[]	[]	[]
Endosulfan sulfate	[]	[]	[]
Endrin	[]	[]	[]
Endrin aldehyde	[]	[]	[]
Heptachlor epoxide	[]	[]	[]
Toxaphene	[]	[]	[]
PCB-1016	[]	[]	[]
PCB-1221	[]	[]	[]
PCB-1232	[]	[]	[]
PCB-1242	[]	[]	[]
PCB-1248	[]	[]	[]
PCB-1254			[]
PCB-1260			
Antimony(total)			[]
Arsenic(total)			[]
Beryllium(total)			
Cadmium(total)			
Chromium(total)			[]
Copper(total)			[]
Cyanide(total)			[]
Lead(total)			
Mercury(total)		[]	[]

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3.4A USEPA PRIORITY POLLUTANT Continued

	Known or	
Believed	Believed	Suspected
Absent	Present	Conc. (mg/L)
[]	[]	[]
[]	[]	[]
[]	[]	[]
[]	[]	[]
[]	[]	[]
[]	[]	[]
		Believed Believed

3.4B NJDEPE EXPANDED PRIORITY POLLUTANTS Continued

			Known or
Chemical	Believed	Believed	Suspected
Compound	Absent	Present	Conc. (mg/L)
Acrylamide	[]	[]	[]
Amitrole	[]	[]	[]
Amyl alcohols	[]	[]	[]
Aniline hydrochloride	[]	[]	[]
Anisole	[]	[]	[]
Auramine	[]	[]	[]
Benzotrichloride	[]	[]	[]
Benzylamine	[]	[]	[]
o-Chloroaniline	ĪĪ	ĪĪ	ĪĪ
m-Chloroaniline	[]	ĺĺ	
p-Chloroaniline	[]	ĺĺ	ĺĺ
1-Chloro-2-nitrobenzene	[]	ĺĺ	[]
1-Chloro-4-nitrobenzene	[]	ĺĺ	[]
Chloroprene	[]	[]	[]
Chrysoidine	[]	[]	[]
Cumene		ίί	[]
2,3-Dichloroaniline		ίί	
2,4- Dichloroaniline		[]	[]
2,5- Dichloroaniline	[]	[]	
3,4- Dichloroaniline	[]	[]	
3,5-Dichloroaniline	[]	[]	
1,3-Dichloropropene	[]	[]	
1,3'-Dimethoxybenzidine	[]	[]	[]
n,n-Dimethyl aniline	[]	[]	[]
3,3'-Dimethyl benzidine	[]	[]	[]
1,1-Dimethylhydrazine	[]	[]	[]
Dioxane	[]	[]	[]
Diphenylamine	[]	[]	[]
Ethylenimine	[]	[]	[]
Hydrazine	[]	[]	
4,4'-Methyene bis	LJ	LJ	L J
(2-Chloroaniline)	[]	r 1	[]
4,4'-Methylenedianiline	[]	[]	
Methyl isobutyl ketone	L J	[]	L J
alpha-Naphthylamine	L J F 1	[]	L J
beta-Naphthylamine	L J	[] []	L J
± •	L J	[] []	
n-Methylaniline	L J	L J	L J
1,2-Phenylenediamine	L J	L J	L J
1,3-Phenylenediamine		[]	
1,4-Phenylenediamine	LJ	LJ	[]

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3.4B NJDEPE EXPANDED PRIORITY POLLUTANTS Continued

			Known or
Chemical	Believed	Believed	Suspected
Compound	Absent	Present	Conc. (mg/L)
Sudan I (Solvent yellow 14)	[]	[]	[]
Thiourea	[]	[]	[]
Toluene sulfonic acids	[]	[]	[]
Toluidines	[]	[]	[]
Xylidines	[]	[]	[]

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3.4C USEPA HAZARDOUS SUBSTANCES

			Known or
Chemical	Believed	Believed	Suspected
Compound	Absent	Present	Conc. (mg/L)
Acetaldehyde	[]	[]	[]
Allyl alcohol	[]	[]	[]
Allyl chloride	[]	[]	[]
Amyl acetate	[]	[]	[]
Aniline	[]	[]	[]
Benzonitrile	[]	[]	[]
Benzyl chloride	[]	[]	[]
Butyl acetate	[]	[]	[]
Butylamine	[]	[]	[]
Captan	[]	[]	[]
Carbaryl	[]	[]	[]
Carbofuran	[]	[]	[]
Carbon disulfide	[]	[]	гэ
Chloropyrifos	[]	[]	
Coumaphos	L J F 1	L J F 1	
Cresol	L J	L J	
	l J	[]	
Crotonaldehyde		L J	
Cyclohexane	LJ	LJ	[]
2,4-D (2,4-dichlorophenoxy	r 1	r 1	r 1
acetic acid)			
Diazinon			[]
Dicamba	[]	[]	[]
Dichlobenil	[]	[]	[]
Dichlone	[]	[]	[]
2,2-Dichloropropionic acid	[]	[]	[]
Dichlorvos	[]	[]	[]
Diethyl amine	[]	[]	[]
Dimethyl amine	[]	[]	[]
Dinitrobenzene	[]	[]	[]
Diguat	[]	[]	[]
Disulfoton	[]	[]	Ī
Diuron	[]	[]	ĺ
Epichlorohydrin	[]	[]	[]
Ethanolaminie	[]	[]	[]
Ethion	[]	[]	[]
Ethylene diamine	[]	[]	
Ethylene dibromide	[]	[]	[]
Formaldehyde	[]	[]	[]
Furfural	[]	L J F]	L J
Guthion	L J []	L J []	[]
	[] []	l J	
Isoprene	[]	L J	[]



3.4C	USEPA HAZARDOUS SUBSTANCES Continued			Known or	
	Chemical	Believed	Believed	Suspec	ted
	Compound	Absent	Present	Conc. ((mg/L)
	Isopropanolamine	[]	[]	[]
	Kelthane	[]	[]	[]
	Kepone	[]	[]	[]
	Malathion	[]	[]]	1
	Mercaptodimethur	[]	ĪĪ	Ī	Ī
	Methoxychlor	[]	ĪĪ	Ī	ī
	Methyl mercaptan	[]	[]	Ī	ĺ
	Methyl methacrylate	[]	[]	Ì	ĺ
	Methyl parathion	[]	[]	j	ĺ
	Mevinphos	[]	[]	i	i
	Mexacarbate	[]	[]	Ì	i
	Monoethyl aminie		[]	ĺ	1
	Monomethyl amine	[]	[]	ſ]
	Naled	[]	[]	ſ]
	Napthenic acid	[]	[]	[]]
	Nitrotoulene	[]	[]	ſ]
	Parathion	[]	[]	ſ]]
	Phenosulfanate	[]	[]	L []
	Phosgene	L J	L J	L [J]
	Propargite	L J	L J F 1	L T	J 1
	Propylene oxide	L J	L J F 1	L T	J 1
	Pyrethrins	L J	L J F 1	L r	J 1
	Quinoline	L J	L J	L r	J 1
	Resorcinol	l J	l J	l r	J 1
		[]	l J	l r	J
	Strontium			l r	J
	Strychnine			l r	J
	Styrene	LJ	LJ	L	J
	2,4,5-T (2,4,5-Trichloro-	r 1	r 1	r	,
	phenoxy acetic acid)	[]	l J	L]
	TDE (Tetrachloro-	r 1	r 1	r	,
	diphenylethane)	[]	[]	[]
	2.45 TD [2.42.45 Total-lane				
	2,4,5-TP [2-(2,4,5-Trichloro-	гэ	r 1	г	1
	phenoxy) propanoic acid]			Ĺ]
	Trichlorofon			Į,	J
	Triethylamine			Ĺ	j
	Trimethylamine			Į	J
	Uranium			Į	J
	Vanadium			Ĺ	J
	Vinyl acetate			[j
	Xylene			Ĺ]
	Xylenol			Ĺ]
	Zirconium			[]



3.4D MCUA PARAMETERS

			Known or	
Chemical	Believed	Believed	Suspected	
Compound	Absent	Present	Conc. (mg/L)	
Ammonia	[]	[]	[]	
Aluminum, Total	[]	[]	[]	
Barium, Total	[]	[]	[]	
Biological Oxygen Demand	[]	[]	[]	
Boron, Total	[]	[]	[]	
Bromide	[]	[]	[]	
Chemical Oxygen Demand	[]	[]	[]	
Chlorine, Total Residual	[]	[]	[]	
Cobalt, Total	[]	[]	[]	
Color	[]	[]	[]	
Fluoride	[]	[]	[]	
Iron, Total	[]	[]	[]	
Magnesium, Total	[]	[]	[]	
Molybendum, Total	[]	[]	[]	
Maganese, Total	[]	[]	[]	
Nitrate-Nitrite (as N)	[]	[]	[]	
Oil & Grease	[]	[]	[]	
Petroleum Hydrocarbons	[]	[]	[]	
pH(in S.U.)	[]	[]	[]	
Phosphorous, Total(as P)	[]	[]	[]	
Radioactivity	[]	[]	[]	
Sulfate(as SO4)	[]	[]	[]	
Sulfide(as S)	[]	[]	[]	
Sulfite(as SO3)	[]	[]	[]	
Surfectants	[]	[]	[]	
Temperature(°C)	[]	[]	[]	
Tin, Total	[]	[]	[]	
Titanium, Total	[]	[]	[]	
TKN(as N)	[]	[]	[]	
Total Organic Carbon	[]	[]	[]	
Total Dissolved Solids	[]	[]	[]	
Total Suspended Solids	[]	[]	[]	

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SECTION 4. SITE PLAN

Please provide a site plan indicating all activities which make-up the proposed discharge and indicate the proposed connection to the wastewater collection system.

SECTION 5. CERTIFICATION

This is to be signed by an authorized representative of the Applicant/Responsible Party **after** completion and review of the information in this Temporary Discharge Application.

I have personally examined and am familiar with the information submitted in sections 1, 2, 3, 4 and all attachments. Based upon my inquiry of those individuals immediately responsible for obtaining the information reported herein, I believe that the submitted information is true, accurate and complete, I am aware that there are significant penalties for submitting false information, including the possibility of fine and/or imprisonment.

Signature of Authorized Representative*	Date
Name & Title	

Return completed application and all other correspondence to: Middlesex County Utilities Authority, P.O. Box 159, Sayreville, NJ 08872. Attention: Environmental Quality (732)721-3800

*Signatory Requirements For Applicant/Responsible Party

The Temporary Discharge Approval shall be signed as follows:

- (1). By a responsible corporate officer, if the Applicant/Responsible Party is a corporation. For the purpose of this paragraph, a responsible corporate officer means (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principle business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operation facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- (2). By a general partner or proprietor if the Applicant/Responsible Party is a partnership or sole proprietorship respectively.
- (3). By a director or highest official appointed or designated to oversee the operation and performance of the activities of the government facility, if the Applicant/Responsible Party is a Federal, State, or local government facility.
- $(4). \ \ By \ a \ duly \ authorized \ representative \ of \ the \ individual \ designated \ in \ paragraph \ (1) \ through \ (3) \ above \ if:$
 - $(i). \ \, The \ \, authorization \ \, is \ \, made \ \, in \ \, writing \ \, by \ \, the \ \, individual \ \, described \ \, in \ \, paragraph \ \, (1) \ \, through \ \, (3);$
 - (ii). the authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the discharge originates, such as the position of plant manager, operator of a well, or well field superintendent, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and
 - $(iii). \ \ the \ written \ authorization \ is \ submitted \ to \ the \ Middlesex \ County \ Utilities \ Authority.$
- (5). If an authorization under paragraph (4) above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or overall responsibility for environmental matters for the company, a new authorization satisfying the requirements of paragraph (4) above must be submitted to the Middlesex County Utilities Authority prior to or together with any reports to be signed by an authorized representative.



EXHIBIT A MIDDLESEX COUNTY UTILITIES AUTHORITY **DISCHARGE LIMITATIONS** TDA No.

APPLICANT: EFFECTIVE DATE: EXPIRATION DATE:

Waste ¹ Characteristics ¹	Daily Maximum	Maximum Monthly Ave.	Monitoring Frequency	Sample Type
Arsenic(Total)	3.000	1.000		Composite
Cadmium(Total)	0.690	0.260		Composite
Chromium(Total)	0.230	0.120		Composite
Chromium (Hexavalent)	0.110	0.060		Composite
Copper(Total)	1.100	0.360		Composite
Lead(Total)	0.600	0.400		Composite
Mercury(Total)	0.110	0.048		Composite
Nickel(Total)	0.360	0.170		Composite
Silver(Total)	0.430	0.240		Composite
Zinc (Total)	2.200	0.660		Composite
Total Toxic Organics ²	2.13	N/L ³		
Volatile Compounds				Grab
Base/Neutral Compounds				Composite
Acid Extractable Compound				Composite
Pentane	M	onitoring Only		Grab
TBA	M	onitoring Only		
MTBE	Monitoring Only			
PCB'S/Pesticides	BMDL ⁴	BMDL ⁴		Composite
pH (Standard Units)	5	5.0 <ph <12.5<="" td=""><td></td><td>Grab</td></ph>		Grab
Total Petroleum Hydrocarbons	100	N/L^3		Grab
Flow (Total not to exceed)			Continu	ious
Flow (Gallons per day)			Continu	ious
Flow (Gallons per minute)			Continu	ious

¹ All units in mg/l, unless otherwise noted



² Total Toxic Organics are defined in Attachment A ³ N/L No Limitation Established At This Time

⁴ BMDL: Below Minimum Detection Limit

ATTACHMENT A

TOTAL TOXIC ORGANICS

The Term "TTO" shall mean Total Toxic Organics, which is the summation of all quantifiable values greater than 0.01 milligrams per liter (10 ppb) for the following toxic Organics:

Base/Neutral
Acenaphthene
Acenaphthylene
Anthracene
Benzidine
Benzo (a) anthracen

Benzo (a) anthracene Benzo (a) pyrene Benzo (ghi) perylene Benzo (k) fluoranthene 3,4, -Benzofluoranthene Bis (2-chloroethoxy) methane Bis (2-chloroethyl) ether Bis (2-chloroisopropyl) ether

Bis (2-ethylhexyl) phthalate 4-Bromophenyl phenyl ether Butyl benzyl phthalate 2-Chloronaphthalene 4-Chorophenyl phenyl ether

Chrysene

Di-n-butyl phthalate Di-n-octyl phthalate Dibenzo (a, h) anthracene 1,2-Dichlorobenzene 1.3-Dichlorobenzene 1,4-Dichlorobenzene 1,2,4-Trichlrobenzene Diethyl phthalate Dimethyl phthalate 2,4-Dinitrotoluene

1,2-Diphenylhyrazine Fluoranthene Fluorene

2,6-Dinitrotoluene

Hexachlorobenzene Hexachlorobutadiene Hexachlorocyclopentadiene Hexachloroethane Indeno (1,2,3-cd) pyrene

Isophorone Naphthalene Nitrobenzene

N-nitrosodi-n-propylamine N-nitrosodimethylamine N-nitrosodiphenylamine

Phenanthrene Pyrene

3,3-dichlorobenzidine

2,3,7,8-tetrachloro-dibenzo-p-dioxin

Acid Extractable

2-Chlorophenol 2,4-Dichlorophenol 2,4-Dimethylphenol 4,6-Dinitro-o-cresol 2,4-Dinitrophenol 2-Nitrophenol 4-Nitrophenol p-Chloro-m-cresol Pentachlorophenol

Phenol

2,4,6-Trichlorophenol

Pesticides/PCB's

Aldrin alpha-BHC beta-BHC

gamma-BHC (Lindane)

delta-BHC Chlordane 4.4'-DDD 4,4'-DDE 4,4'-DDT Dieldrin

alpha-Endosulfan beta-Endosulfan Endosulfan sulfate

Endrin

Endrin aldehyde Heptachlor Heptachlor epoxide

Toxaphene PCB-1016 PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1260

Volatile Organics

Acrolein Acrylonitrile Benzene

Chloroethane

Bis (chloromethyl) ether Bromoform (Tribromomethane)

Carbon tetrachloride Chlorobenzene Chlorodibromomethane

2-Chloroethyl vinyl ether Chloroform (Trichloromethane)

Dichlorobromomethane Dichlorodifluoromethane 1.1-Dichloroethane 1,2-Dichloroethane 1,1-Dichloroethylene 1,2-Dichloropropane 1,3-Dichloropropylene

Ethylbenzene Methyl bromide (Bromomethane)

Methyl chloride (Chloromethane) Methylene chloride (Dichloromethane)

1,1,2,2-Tetrachloroethane Tetrachloroethylene

Toluene

1,2,-trans-Dichloroethylene 1,1,1-Trichloroethane 1,1,2-Trichloroethane Trichloroethylene Trichlorofluromethane

Vinyl Chloride (Chloroethylene)

Xylene

DRAFT FINAL